

**REMARKS**

Claims 32-38, 40, and 74-86 are withdrawn from consideration as being drawn to a non-elected invention. Applicants will cancel these claims upon indication of allowable subject matter in the elected invention.

Claims 87-88, 91-92, and 94 have been canceled without prejudice. Claims 39 and 93 have been amended mainly for clarification purpose. The amendments are made solely to expedite prosecution of the application, and Applicants reserve the right to prosecute claims of similar or differing scope in subsequent applications. No new matter has been introduced.

Applicants respectfully request reconsideration in view of the following remarks. Issues raised by the Examiner will be addressed below in the order they appear in the prior Office Action.

**Non-entered claims**

Applicants note that the claim amendments (in particular, previously-added claims 87-96) filed on 5/7/2004 have NOT been entered. As described in the previous response, these claims are fully supported by the original claims (e.g., original claim 39) and the specification (e.g., page 19, lines 14-20; page 25, lines 8-23; and page 32, line 17 – page 33, line 21; page 36, line 8 – page 37, line 4). No new matter has been introduced. Clarification is respectfully requested.

**Claim rejections under 35 U.S.C. § 112, first paragraph**

The Examiner has rejected claims 39 and 73 under 35 USC § 112, first paragraph, for alleged lack of written description. Applicants traverse these rejections to the extent it is maintained over the claims as amended.

Specifically, the Examiner has asserted that “the claims recite any member of Ephrin or Eph family, however, the specification only teaches EphrinB2 and EphB4 . . . Neither the specification nor the art of record teaches any other Ephrin or Eph proteins expressed by arterial smooth muscle cells. In other words, there is no evidence of record that the applicants had

possession of any other arterial smooth muscle cells that expressed any other Ephrin or Eph than EphrinB2 and EphB4" (Office Action, page 3, lines 16-21).

Applicants contend that the pending claims meet the written description requirement. Nevertheless, solely to expedite prosecution of the application, Applicants have amended independent claim 39 to more particularly define the Ephrin family ligand to be Ephrin B2 and to remove the recitation of "Eph family receptor." Applicants submit that a skilled practitioner would conclude that Applicants had possession of the claimed invention at the time the application was filed. Accordingly, reconsideration and withdrawal of rejection are respectfully requested.

Claim rejections under 35 U.S.C. § 112, second paragraph

Claims 39 and 73 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Specifically, the Office Action asserts that it is unclear whether "the recited agent binds to an Ephrin family or an Eph family protein present on an arterial smooth muscle cell or on any other cell."

As described above, Applicants have amended independent claim 39 to clarify that the agent binds to Ephrin B2, thereby obviating the rejection. Accordingly, the Examiner is respectfully requested to reconsider and withdraw all rejections under 35 U.S.C. § 112, second paragraph.

Claim rejections under 35 U.S.C. § 102

Claims 39 and 73 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Yamamoto et al. Claims 39 and 73 are also rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Haber et al. and Olson et al.

Specifically, the Examiner alleges that "the claims as instantly presented do not recite that the cell surface proteins are present on the arterial smooth muscle cells. Since the

expression of the proteins would be an inherent property and the cited arts teach the two steps of the claimed methods as instantly presented, claimed invention is anticipated by the cited prior art of records" (Office Action, page 5, lines 9-13). Applicants traverse these rejections to the extent it is maintained over the claims as amended.

To anticipate an invention, the prior art reference must disclose each and every aspect of the claimed invention. Thus, to anticipate the method of amended claim 39, a prior art reference would have to disclose a method for assessing an effect of an agent on arterial smooth muscle cells, comprising: (a) adding said agent to said isolated arterial smooth muscle cells expressing Ephrin B2, wherein said agent binds to Ephrin B2; and (b) comparing the effect of said agent on said isolated arterial smooth muscle cells with a suitable control.

The Examiner alleges that the method disclosed in the cited references inherently possesses the elements of the claims. However, Applicants note that these cited references (Yamamoto et al., Haber et al., and Olson et al.) merely describe treating cultured arterial smooth muscle cells with different compounds. There is no teaching in any of these references that any of their compounds would bind to Ephrin B2 as recited in amended claim 39. In fact, none of the references teach that a cell surface protein such as Ephrin B2 is present on any of the cultured arterial smooth muscle cells.

Inherency is not a matter of probabilities. As stated by the Court of Appeals for the Federal Circuit: "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999). Furthermore, "[i]n relying upon a theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

Applicants submit that the claimed features would not necessarily flow from the methods disclosed by the cited references. None of the references state whether or not any of their compounds would bind to Ephrin B2. Therefore, it is certainly a matter of guesswork and probability to determine whether any compound would have an effect on the cultured arterial

smooth muscle cells by binding to Ephrin B2. Indeed, the teachings of Yamamoto et al., Haber et al., and Olson et al. are completely silent on this issue.

Accordingly, Applicants contend that the cited references, singly or in combination, do not inherently disclose the features of the present claims. Nonetheless, to expedite prosecution, claim 39 is amended to specify that the agent binds to Ephrin B2. Dependent claims 73, 89-90, 93, and 95-96 are not anticipated by any of the cited references for the same reasons described as above. Reconsideration and withdrawal of this rejection are respectfully requested.

### CONCLUSION

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the pending rejections. Applicants believe that the claims are now in condition for allowance and early notification to this effect is earnestly solicited. Any questions arising from this submission may be directed to the undersigned at (617) 951-7000.

If there are any other fees due in connection with the filing of this submission, please charge the fees to our **Deposit Account No. 18-1945**. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit account.

Respectfully Submitted,



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